

ABSTRACT

A DNA construct generates and directs the processing, targeting and stable accumulation of target proteins in transgenic plant seeds. A method for constructing transgenic plants provides a general strategy in which unique transmembrane domain and cytoplasmic tail sequences are used as anchors for delivering recombinant target proteins via distinct vesicular transport pathways to specific vacuolar compartments, thus enabling stable accumulation of foreign target proteins in transgenic plants. A plant gene expression system has flexibility to allow the target proteins to bypass or subject to plants Golgi-specific post-translational modifications.